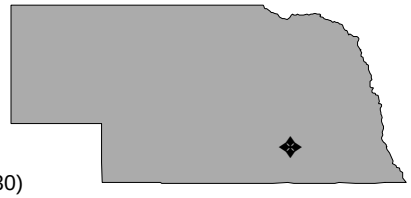
Cornhusker Army Ammunition Plant — NPL

Size: 11,936 acres
Mission: Manufactured ammunition
HRS Score: 51.13; placed on NPL in July 1987
IAG Status: IAG signed in 1990
Contaminants: Explosives and heavy metals
Media Affected: Groundwater and soil
Funding to Date: $44.4 million
Estimated Cost to Completion (Completion Year): $37.0 million (FY2030)
Final Remedy in Place or Response Complete Date for All Sites: FY2001



Hall County, Nebraska

Restoration Background

Cornhusker Army Ammunition Plant is a former ammunition manufacturing facility, which used numerous sumps, cesspools, and leaching pits in the manufacturing process. Those areas, as well as disposal pits, old landfills, and open burning areas, contributed to the environmental problems at the installation, resulting in its listing on the National Priorities List (NPL).

An Initial Assessment Study completed in FY80 identified 65 sites at the plant. In FY83, the Army identified an explosives-contaminated groundwater plume that had migrated off site. Unlined leaching pits, cesspools, and sumps were the primary sources of contamination. The off-site contamination affected more than 250 private residences in Hall County and nearby Grand Island. In FY86, the Army removed and incinerated about 40,000 tons of contaminated soil from cesspools and leaching pits, eliminating almost 95 percent of the sources of contamination at the installation. In FY86 and FY95, the Army provided funds to extend the Hall County municipal water distribution system to affected Grand Island residences. In FY89, the community formed a Local Redevelopment Authority (LRA). In FY94, the Army conducted Interim Remedial Actions to remove 5,000 tons of contaminated soil and completed an interim Record of Decision (ROD) for cleanup of groundwater contamination (Operable Unit [OU] 1).

To reduce restoration costs, the Army used temporary well points instead of full-scale cased wells and used innovative chemical screening techniques to identify explosive materials in groundwater. In FY95, the Army conducted a pilot-scale study of an innovative treatment technology that uses a peroxone system to break down explosive compounds. The study was successful enough to warrant a field-scale study.

In FY96, the Army submitted the final Remedial Investigation (RI) report and designated six sites (OU2) as requiring no further action. A Site Inspection was submitted for contamination at former locations of underground storage tanks. The Army submitted the 90 percent design for the groundwater treatment facility at OU1. It also issued the explanation of significant differences for the OU1 ROD and held public comment periods to explain a change in the location of the discharge point. In FY96 and FY97, the Army solicited comments from members of the community to determine the level of interest in forming a Restoration Advisory Board (RAB). Because of a lack of public interest, the RAB was not established.

In FY97, a change to the OU1 ROD initiated phased treatment. This change, with community consent, allows accelerated hot-spot removals and moved the discharge location on site. The U.S. Army Corps of Engineers completed changes in the design of the OU1 treatment system after discussions with the public and regulatory agencies. A public meeting was held to discuss the Proposed Plan for OU2; no comments were received. A draft final ROD for sites at OU2 was submitted for signature. The OU2 ROD requires no action to be protective of human health and the environment under future land use requirements.

FY98 Restoration Progress

The installation submitted the final Feasibility Study and drafted the Proposed Plan for OU3 and OU4. The installation also received approval for the final Proposed Plan and ROD for OU2. EPA signed the OU2 No Response Action/No Further Action ROD in September 1998. Construction of the OU1 groundwater treatment facility is 90 percent complete. The Army continued semiannual off-post monitoring. These data will provide more information on the natural groundwater processes off-post to assist the Army and the regulatory agencies in selecting the most effective remedy.

The installation planned to petition for partial NPL deletion in FY98. Due to extended negotiation and a late FY98 signature on the OU2 ROD, the partial deletion procedures for this property were delayed.

Plan of Action

- Complete OU3 and OU4 Proposed Plans and RODs in FY99
- In FY99, begin a final Removal Action for contaminated soil
- Begin pump-and-treat operations at the water treatment plant in FY99
- Designate a new OU to remediate the open burning/open detonation area in FY99
- In 1999, begin partial NPL deletion procedures so that OU2 and other property identified for transfer can be designated as excess property

FY99 Funding by Phase and Relative Risk